

SUMMARY

Upcycling & sustainable based thinking in product design

Developed by:







Introduction



The impact of the textile production chain on the environment is bringing the industry on the second place of most polluted industry. In order to decrease the environmental disposal there are different ways to achieve it.

These are:

Recycle

Reuse

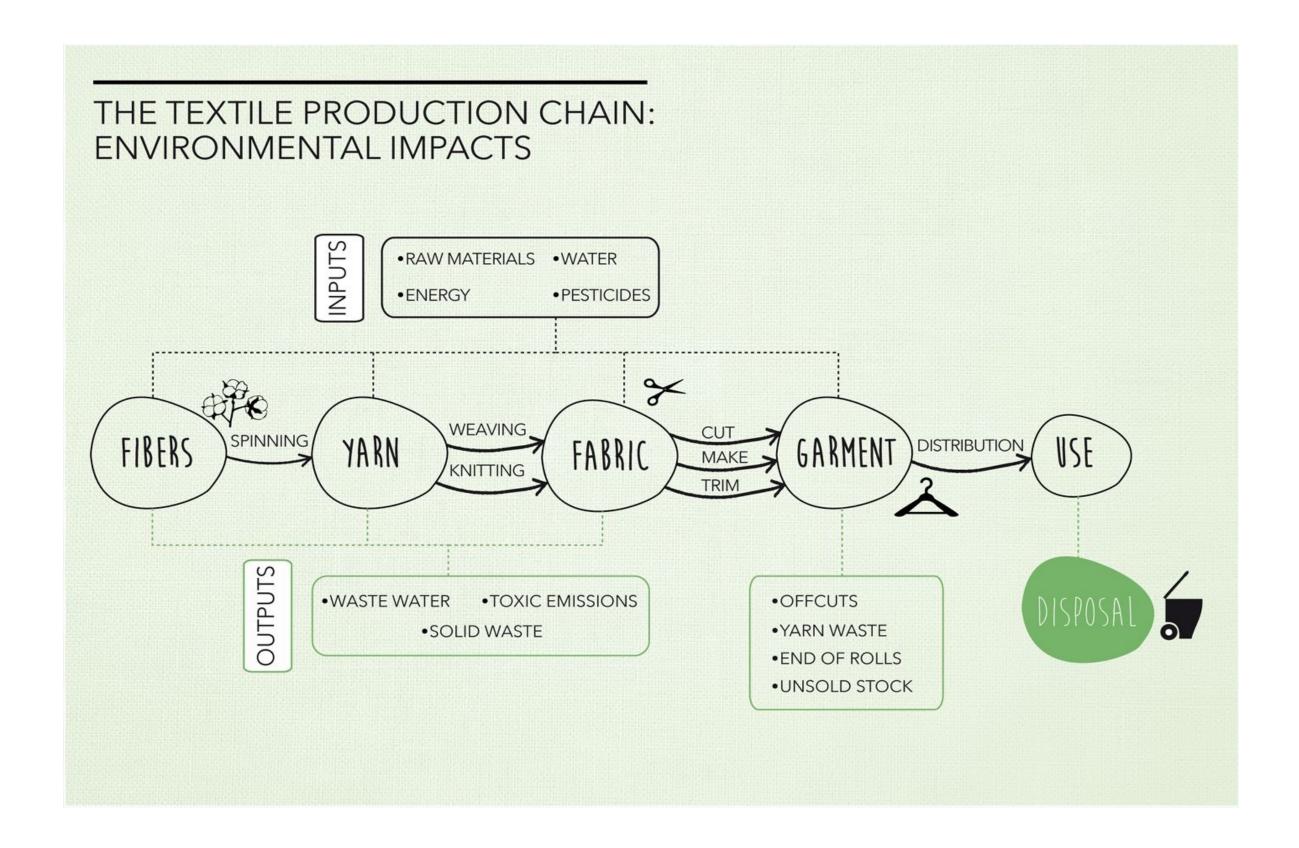
Remanufacture

Upcycling

The reshaping of the product design process by adding sustainability as one of the prioritites enhances the sustainable based thinking in product design.

Textile production chain environmental impact

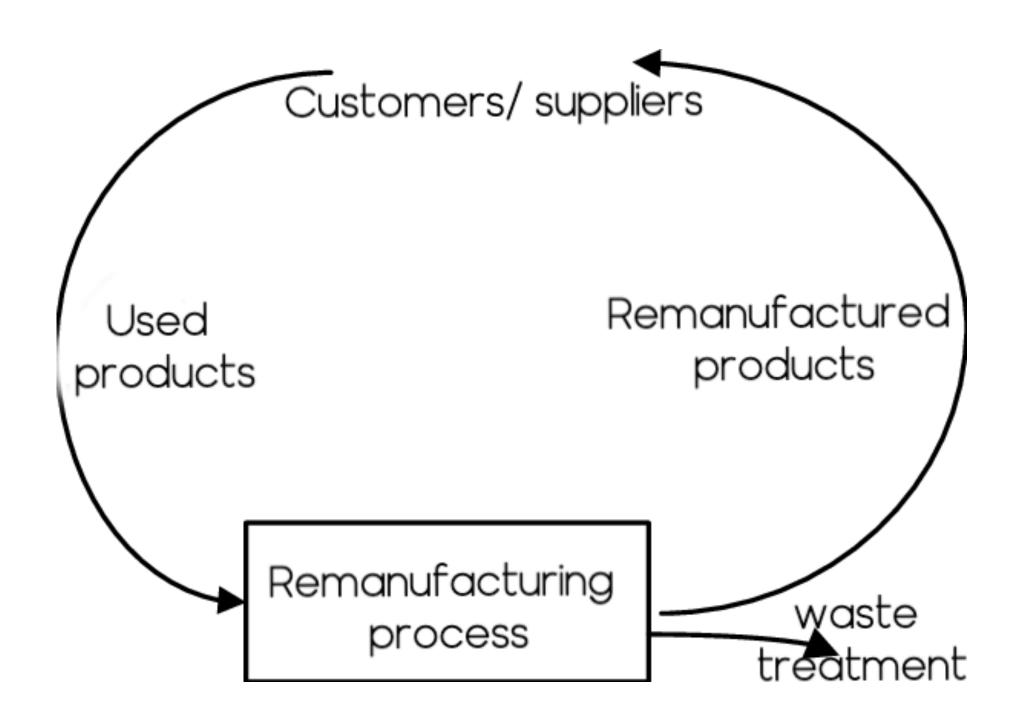




Textile production chain environmental impacts: In the textile chain the environment gets affected by the inputs and outputs during the production process and by the disposal at the ned of the use.

Decrease of environmental disposal





Decrease of
environmental
disposal: Both
suppliers and
customers must
contribute through
remanufacturing
processes for
achieving the
decrease of
disposals.

ACTIVITY



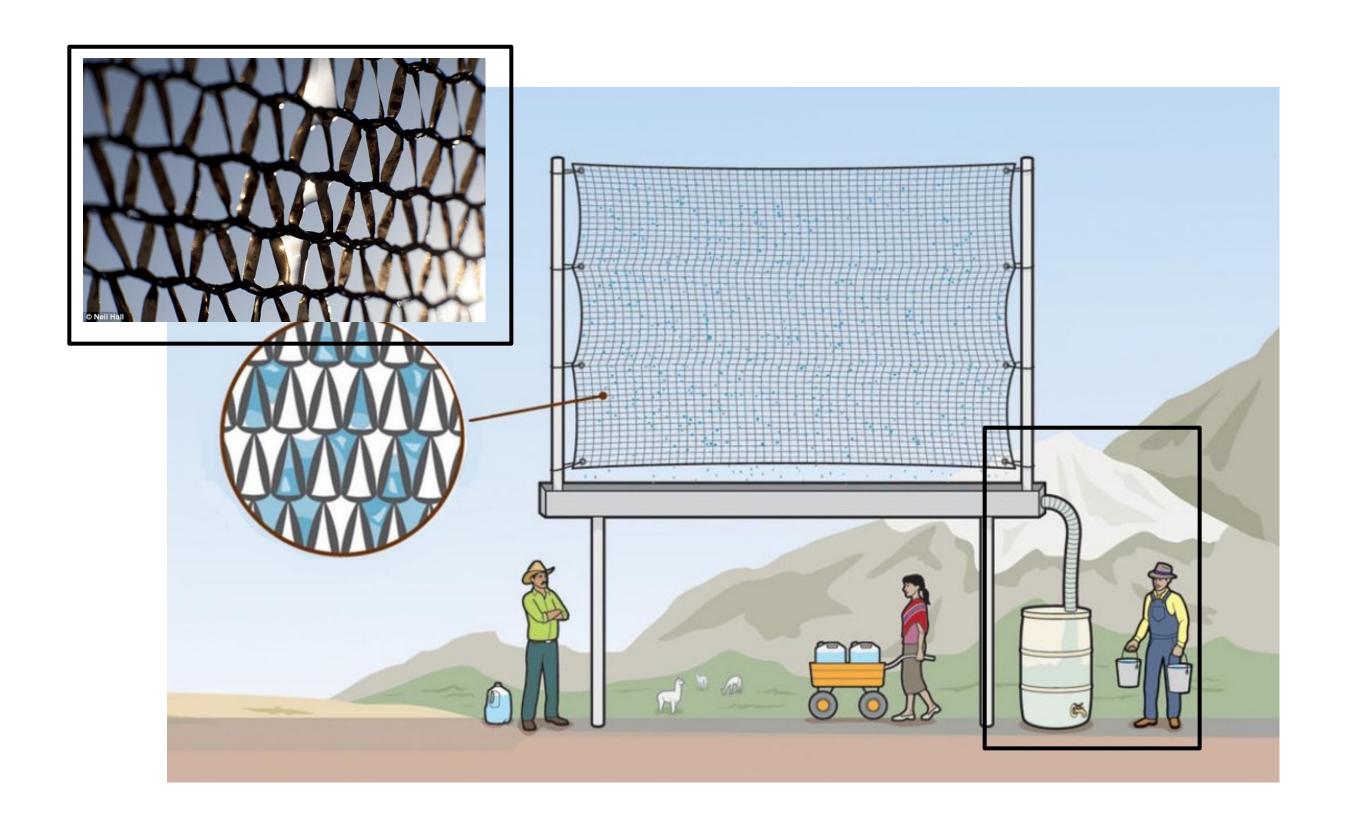
Methods of low disposal

- Reuse
- Recycle
- Remanufacturing
- Upcycling



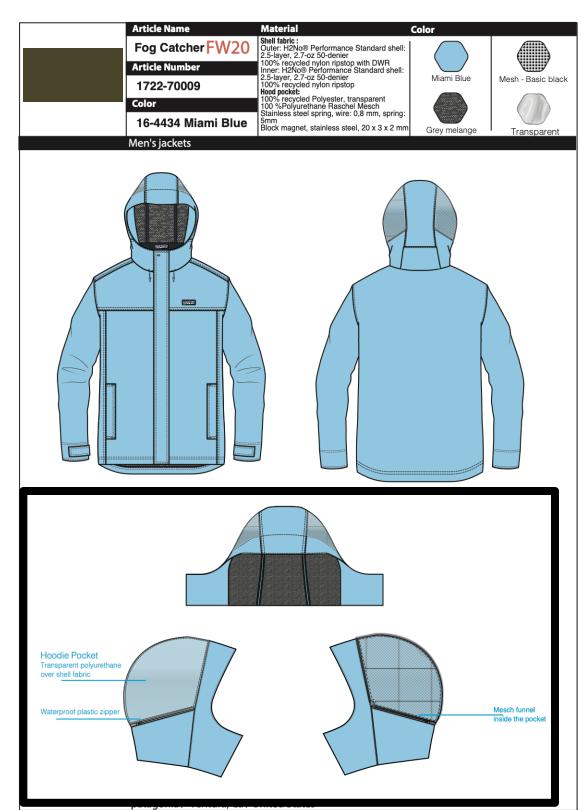
Sustainable based thinking example

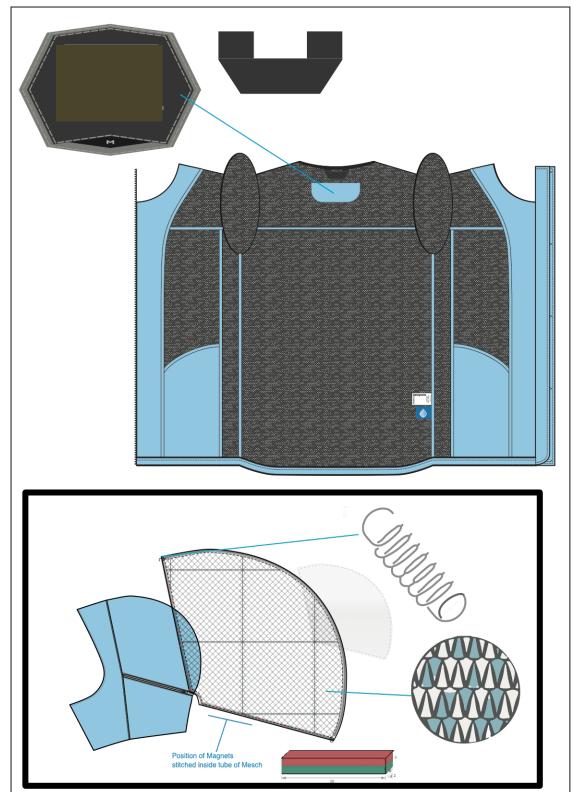




The Fog Catcher example: By learning from nature and biomimicry, the meshes were created aiming at the water consumption for third world countries and territorries where there is minimum water supply.



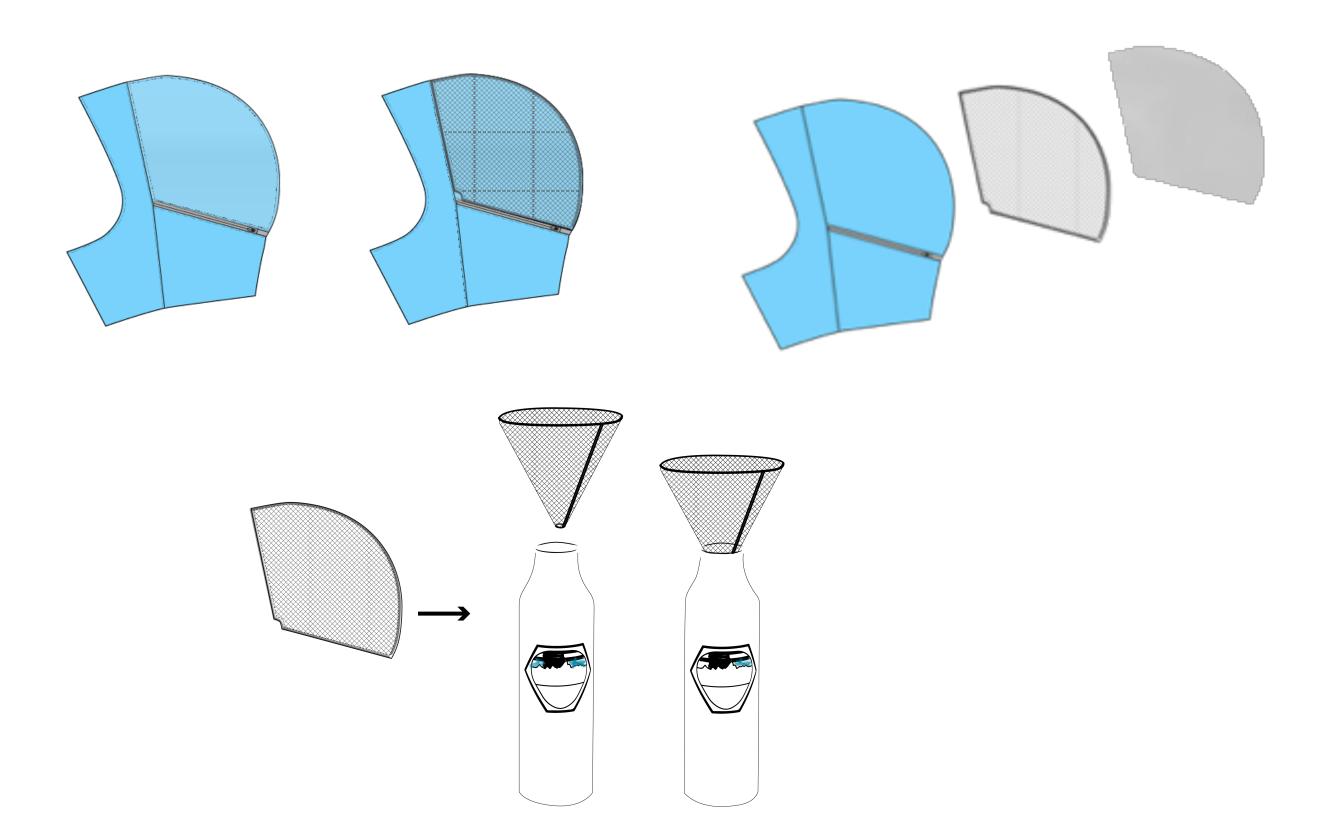




The Mesh Jacket:

Focusing on realising the needs for outdoor sports like climbing, and following the example of the Fog Catcher, the team designed a jacket for an outdoor clothing company. Tha targets were the fulfillnes of water consumption while doing outdoor sports and the the decrease of plastic bottles use.

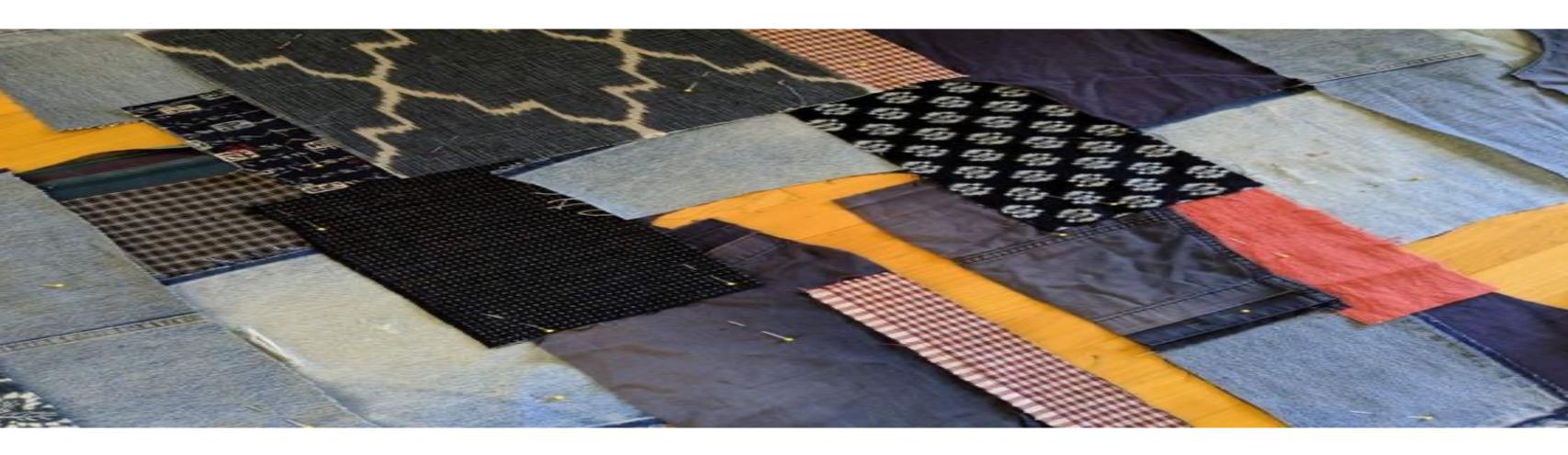




The Mesh Jacket:
The hood contains,
partly, a mesh part
that can be
disassembled,
formatted into a
cone and fit inside
the bottleneck.



This was a summary of an open educational resource. Please visit http://destexproject.eu/ to see the full amount of intellectual outputs of the project.



Disclaimer:

The European Commission support for the production of this report does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Acknowledgement:

DESTEX project (INDUSTRIAL AND CREATIVE DESIGN IN ADVANCED TEXTILE MANUFACTURING; project reference number 2019-18E01-KA203-060379) is cofunded by the Erasmus+ programme of the European Union.

